

# OREGON ELECTRIC VEHICLE CHARGING NETWORK

## What is it?

Electric vehicle (EV) charging stations are locations where vehicles can plug in to an electrical source to re-charge batteries. EV charging stations are necessary to support what is expected to be a growing fleet of EVs throughout Oregon.

## Why is this important?

The nation is poised for a sea change in the transportation sector. Petroleum-based transportation is not sustainable in the long run, either environmentally or economically. Our dependency on imported fossil fuels, impacts of global climate change and the introduction of new carbon emission standards have created an urgency to find alternative solutions.

Currently, the biggest limitation for drivers thinking about making the transition to EVs is the absence of a reliable network of charging facilities to increase the range of these vehicles and to alleviate any fear of “running out of juice.” There are only about 400 all-electric vehicles registered in Oregon, but within a decade, plug-in cars could account for as much as 20 percent of new vehicles sold in Oregon.

## Why is ODOT doing a statewide procurement?

Oregon is poised to lead the nation in the early adoption of plug-in electric vehicles and having one common, open system for charging all types of vehicles is an important factor in making the transition successful. This effort will help gain public recognition and consumer confidence in the EV charging infrastructure by providing uniform performance and safety features throughout Oregon.

ODOT's Office of Innovative Partnerships will negotiate purchase agreements with the top firms selected through a statewide procurement. These agreements will ensure that equipment installed in different locations and by different electric utility companies will provide a common charging experience for all EV users. Also, aggregating demand through the State contracts will reduce the cost and avoid separate procurements for each jurisdiction. The result will be centralized purchase agreements for EV charging equipment in place by the end of 2009, which will be accessible to local governments, utility companies and others.

## ODOT applying for federal stimulus funds

ODOT applied to the U.S. Department of Energy for funding through its Clean Cities Program. Governor Kulongoski's [Oregon Way Advisory Group endorsed the application as its first signature project for American Recovery and Reinvestment Act funding](#). The grant could be up to \$15 million and will require 50 percent matching funds to be contributed by project partners. If successful, the project will increase the number of electric vehicles and charging stations throughout the state and provide public outreach and education on electric vehicles. ODOT will know in August of 2009 whether it will receive the grant funds.

## Project Goals

The main goal is to incubate demand for EVs by providing financial incentives and establishing predictable availability of charging stations at convenient and easy-to-find locations. Other objectives will:

- allow access to centralized price agreements for EV charging equipment;
- bring local partners and private industry together to combine resources and develop an integrated EV charging network;
- establish uniform Oregon standards for EV charging stations, including signage, appearance, performance and safety;
- aggregate demand for EV charging equipment to reduce costs; and
- reduce dependence on foreign oil and reduce carbon emissions from transportation sources.

## Development of Installation Manual

ODOT has begun the development of a simple, easy-to-follow installation guide for installing EV charging stations. The “EV Charging Station Installation Manual” will provide a step-by-step guide for preparing, purchasing, installing, and maintaining EV charging stations for the individual consumer, business owner, or government project manager. This guide will include, but will not be limited to, the following information:

- regulations governing EV Charging Station installation, including required permits and code considerations
- contact information for all relevant permitting and regulatory entities as well as participating Oregon utility companies
- upcoming changes in EV Charging technology and the impact upon current purchasing decisions

For more information: [http://www.oregon.gov/ODOT/HWY/OIPP/inn\\_ev-charging.shtml](http://www.oregon.gov/ODOT/HWY/OIPP/inn_ev-charging.shtml)